

***Amendments to the Claims***

This listing of claims will replace all prior versions, and listings of claims in the application.

1. A method for simulating and modeling a batch processing manufacturing facility, comprising the steps of:

(1) selecting a sequence of unit operations wherein each of said sequence of unit operations has an identifier code;

(2) selecting a set of scheduling cycles for each of said sequence of unit operations;

(3) referencing a master table using said identifier code to obtain operational parameters for each of said sequence of unit operations;

(4) generating a block flow diagram using said sequence of unit operations and said operational parameters; and

(5) generating a process time line using said operational parameters, said block flow diagram, said set of scheduling cycles for each of said sequence of unit operations, wherein said process time line is used as a tool for batch processing and facility design.

2. Canceled.